

DRAFT 2/10/78

Dr. Frank Press
Director, Office of Science
and Technology Policy
Executive Office of the President
360 Old Executive Office Bldg.
Washington, D.C. 20500

Dear Dr. Press:

The Department of Energy is aware, through several communications with your office, that you are in the process of preparing an issue paper and perhaps recommendations to the President on the issue of government patent policy. As we understand it, the recent concern for this issue is based at least in part on the consideration of the bill introduced by Congressman Ray Thornton (H.R. 6249) and on the recent hearings held by Senator Gaylord Nelson's Select Committee on Small Business during December of last year. You have requested, and this letter is intended to provide, the Department of Energy's comments on this issue.

As you know, government patent policy is a highly emotional issue wherein advocates generally take one of two extreme positions: that the Government should acquire title to inventions developed under its R&D activities (the title policy); or that the inventing contractor should retain title to such inventions with the Government acquiring a free license to utilize the invention for government purposes (the license policy). As I am sure you are also aware, Congress has legislated inconsistently on this policy issue, applying differing guidelines and policies sometimes to government agencies, sometimes to individual programs of an agency, and sometimes to R&D programs which cross agency lines.

One of the most recent expressions of Congressional policy on this issue, and one of the most well thought out policy expressions, was that developed for the Energy Research and Development Administration (ERDA) in December of 1974 (Public Law 93-577). This legislative patent policy, now applicable to DOE, was a compromise between the two extreme positions biased in favor of the Government normally taking title, but providing the flexibility to enable DOE to waive patent rights subject to certain limitations and conditions. This policy has been utilized by ERDA and DOE for approximately three years, and we are in the process of preparing a final report to the President and to Congress on its applicability to our energy programs as required by Section 9(n) of Public Law 93-577.

It is premature to provide you with the full conclusions of this report. We believe, however, that the report will indicate that the ERDA/DOE legislative patent policy is technically sufficient and appropriately flexible to allow this Department to support the wide variety of research, development and demonstration activities that it must undertake, in every field of energy technology, and with a wide variety of private, industrial and university entities. In addition to being technically sufficient and appropriately flexible, the policy was identified at the recent hearings of Senator Nelson as being an acceptable compromise by Representative John F. Seiberling, Chairman Michael Pertschuk of the FTC, and Assistant Attorney General John H. Shenefield. In addition, inasmuch as our policy initially presumes government ownership of title, it adequately addresses the emotionalism of the Government "giveaway" and contractor "windfall" arguments.

Even though the DOE policy is adequate for the needs of this Department, there are problems. First and foremost, the administrative burden associated with a policy where the Government is presumed to acquire title, subject to a waiver possibility, creates substantial burdens in the requisitioning, negotiation and determination of waivers for both this Department and our prospective contractors. This, in turn, creates delays and burdens in the R&D contracting process. Additionally, a patent policy that provides for acquisition of ownership in the Government places the burden upon the Government to see that the resulting technology is utilized. It now becomes the Government's responsibility to obtain domestic and foreign patents, to advertise their availability, to negotiate licensing agreements and to sue infringers. Finally, a title policy does not fully encourage the participation of industry in the Government's R&D programs, especially those segments of industry which have invested a great deal of private capital in the area of research to be undertaken by government contract.

Notwithstanding these problems, DOE is functioning adequately under its patent policies, as perhaps would be the case if such a policy were applied to government agencies having equal or smaller R&D programs. However, the administrative burden associated with the DOE policy, if applied to government agencies with larger R&D programs, as would be the case with the Department of Defense, would be burdensome to the point of becoming a substantial barrier to research and development. As a result, we cannot recommend the DOE policy as one that could be made applicable to all government agencies.

As we have mentioned, this issue is not only emotional but is very complex, involving interrelationships between economic, scientific, business and social considerations. To illustrate this complexity, both supporters of the license policy and supporters of the title policy used the same illustration to support their concepts in the 1965 patent policy hearings before Senator John L. McClellan. The government title proponents cited the example of penicillin as where price reduction and widespread competition was achieved without exclusive patent rights being owned to that drug. The license policy proponents responded, however, that penicillin was discovered in 1929 and was not made available until 1944, and only then after the Government paid for its commercialization. It was argued that had patent rights been available, industry would have marketed the drug much sooner.

The issues also become clouded because of the emotionalism involved with allegations of "windfall profits" going to government contractors, concerns regarding "government giveaway policies", and hints of valuable technology being suppressed by industry. These concerns have far too often controlled the Government patent policy issue. The Government-supported studies, however, disclose that there is simply no basis in fact for these emotional concerns. Approximately 10 years ago, the Federal Council for Science and Technology supported the largest, most thorough study ever conducted on the issue of Government patent policy—commonly referred to as the Harbridge House Report. This report made the following findings:

- government ownership with an offer of free public use does not alone result in commercialization of research results;
- a low overall commercial utilization rate of government-generated inventions has been achieved (approximately 12 percent), but that the rate doubled when contractors with commercial background positions were allowed to keep exclusive commercial rights to the inventions;
- "windfall profits" do not result from contractors retaining title to such inventions; and
- little or no anti-competitive effect resulted from contractor ownership of inventions because contractors normally licensed such technology, and where they did not, alternative technologies were available.

DOE is presently funding with Harbridge House an additional study for its final report to the President and Congress on the necessity of compulsory licensing in the energy field. This study similarly shows that there is little or no adverse effects resulting from the enforcement of exclusive patent rights, and shows no pattern of increased utilization as a result of open licensing. In fact, the study indicates some stimulation of research occurs when the exclusivity of patent rights is enforced.

In view of these studies and the experience of ERDA/DOE under its policies, it is recommended that if the Administration intends to support a patent policy that will be applicable government-wide, such a policy should address the real issues that confront the R&D sponsoring agencies, rather than the emotional issues. The problems are not those of "windfall", "giveaway", "suppression" or an adverse effect on competition, but rather are those of insuring commercial utilization of the results of government sponsored research, of insuring that the agencies can work cooperatively with those segments of industry having the most advance commercial technology, and of reducing the administrative workload to the extent consistent with the overall public interest.

Our factual information shows us that we have no need to be concerned with "giveaway" if the general public is not even receiving the benefits of a government sponsored technology through commercial utilization.

Our factual information is that utilization of this technology is very, very low. Accordingly, we should be more concerned with this fact than with the possibilities of "windfall" which have not been shown to exist.

We must accordingly use all possible incentives, including the incentive of exclusive patent rights, to increase the flow of technology from the Government's R&D programs into the commercial sector.

There has always been considerable discussion of whether industry will or will not cooperate in government R&D programs under a title policy, and there is a frequently quoted position that there are always corporations standing in line for government R&D contract monies. This, of course, is true. This does not say, however, that those corporations, or segments of corporations, with the most advanced expertise in a particular R&D program will be the ones to accept R&D contracts, particularly when the contract is in a highly proprietary and commercial area of the company and where they have invested considerable risk capital. Most particularly, in view of the mission of this Department to work in a cooperative relationship with industry to assist in the development of commercial energy alternatives, we are working in areas that have the highest commercial sensitivities. We know that there are corporations who will not work with us, or even will not approach this Department, because of our patent and data policies. This is true even with the flexibility our legislation provides.

And finally, there should be concern regarding the administrative workload in adopting a DOE type policy for government-wide applications. Such a policy could involve negotiating patent waivers for the approximately 30,000 contracts and grants awarded by the Government each year, and for the approximately 8,000 inventions that are reported annually under these contracts and grants. This, of course, would be a monumental burden. Add to this burden the fact that if the Government is to adopt

a title policy, it is our responsibility for protecting the resulting inventions by the filing of patent applications in the United States and foreign countries. Once patents are issued, there is the necessity to advertise and to aggressively license such patents, develop related technology packages, and finally to enforce the patents against unlicensed users if such policies are adopted.

It was for these reasons that the Thornton Bill keyed upon placing the initial responsibility for commercializing research results on the inventing contractor--who has the most interest in and knowledge of the invention of its own creation. Thus, through a series of strong "march-in" rights, the Thornton Bill would then limit the administrative burden to only those inventions that prove to be commercially important, and more particularly, commercially important to more than one company.

Studies indicate that of the Government's 8,000 annual invention disclosures, only a handful of inventions will rise to such commercial importance.

It has been claimed that the use of "march-in" rights does not really protect the public's interest because such rights have been available to the Government for more than 10 years, and as yet, have not been utilized. The conclusion is drawn, therefore, is that such rights are ineffective. This is an erroneous conclusion. The "march-in" rights were developed to take care of and address the issues of "windfall", "suppression", and the detrimental effects of patent rights to competition. It is because these problems are illusionary, and not actual, that the "march-in"

rights have not been utilized. If and when these negative effects occur as a result of allowing a contractor to retain title to an invention of commercial importance, the "march-in" rights are there to address them. Otherwise, they will never be used.

In summary, although this Department has the best legislation that has ever been passed by Congress in the patent policy area, and although it is sufficiently flexible to enable DOE to fulfill its mission, we do not believe that this policy would be operable or in the public interest if applied on a government-wide basis. If a government-wide policy is to be adopted, we believe an approach like the Thornton Bill is the only approach that would work without extensive government commitments to the issues of contract negotiations, invention protection, and assurances of commercial utilization. A similar bill was suggested by the FCST Committee on Government Patent Policy in the last Administration, and was suggested years ago by the Congressionally established Commission on Government Procurement.

Sincerely,

Eric J. Fygi
Acting General Counsel

John M. Deutch
Director
Office of Energy Research

cc: Dr. Jordan J. Baruch, Commerce
James Jura, OMB